

REMARKS

By the present amendment, claim 19 has been canceled, claims 5, 10-11, 13, 15, 17, 20, 28, 30, 32-34, 36, and 38-40 have been amended, and claims 48-54 have been added.

Claims 5-7, 10-15, 17, 20-21, 24, 26, 28-34, 36, 38-40, 42-44 and 46-54 are pending in the present application. The claims are directed to a liquid crystal display device.

In the Office Action, claims 5 and 32-34 are rejected under 35 U.S.C. 112, second paragraph as indefinite. It is alleged in the Office Action that the recitation "in that order from the first substrate side on the second substrate" is unclear.

This recitation and variants thereof have been clarified in the claims by reciting the position of each element individually with respect to the side of another element. The modifications do not modify the scope of the respective claims. Accordingly, it is submitted that the rejection should be withdrawn.

Next, in the Office Action, the following prior art rejections are set forth:

- claims 5, 10 and 13-15 are rejected under 35 U.S.C. 102(e) as anticipated by US 6,124,905 to Iijima (Iijima);
- claims 6, 12, 17, 19-22, 34, 36, 38, 39 are rejected under 35 U.S.C. 103(a) as obvious over Iijima;
- claims 7 and 11 are rejected under 35 U.S.C. 103(a) as obvious over Iijima in view of JP 10-239683 (Hiroshi);

- claim 15 is rejected under 35 U.S.C. 103(a) as obvious over Iijima in view of US 5,663,816 to Chen (Chen);
- claims 15, 22, 24, 26 and 28-31 are rejected under 35 U.S.C. 103(a) as obvious over Iijima in view of JP 08-146207 (Hirozo); and
- claims 40, 42 and 43 are rejected under 35 U.S.C. 103(a) as obvious over Iijima in view of US 6,175,399.

Reconsideration and withdrawal of the rejections is respectfully requested. Iijima discloses crystal display devices in which a diffusing plate is used with a reflective polarizer. However, the reflective polarizer in Iijima is systematically located in front of the diffusing plate as seen from the visible side. As a result, not all the visible light is diffused by the diffusing plate, so that sufficiently white and bright reflected light cannot be obtained with a wide viewing angle cannot be obtained with Iijima.

For example, in Figs. 4 and 7, a reflective polarizer 40, a light diffusing plate 30, and a reflector 90 (in Fig. 4) or a reflective polarizer 60 (in Fig. 7) are disposed on a side of the glass substrate 22, which is a substrate of an STN liquid-crystal display device 20 on a side opposite the visible side, opposite an STN liquid crystal 26. Thus, in both of these display devices, the reflective polarizer 40 is disposed on the visible side (upper side in the figures) of the light diffusing plate 30. Therefore, when light incoming from the upper side in Figs. 4 and 7 passes through the STN liquid-crystal panel 30 and falls on the reflective polarizer 40, a part of the light is reflected there and

emitted to the visible side without being diffused by the light diffusing plate 30. Accordingly, sufficiently white and bright reflected light cannot be obtained with a wide viewing angle.

In contrast, in the presently claimed invention, a white diffusing film and a reflection member, which may be a reflector or a reflection-type polarizing film, are disposed in a liquid crystal display device having a first substrate, second substrate and liquid crystal. Further, the white diffusing film is disposed adjacently to the second substrate, as recited in present claims 5 and 10, the white diffusing film is disposed on the visible side of the first substrate and a polarization film without reflection characteristics is disposed on the visible side of the white diffusing film, as recited in present claim 11, or the white diffusing film is disposed on a side of a polarizing film without reflection characteristics opposite the second substrate, as recited in present claims 13, 15 and 30, or a white diffusing film is disposed on a side of the second substrate opposite the liquid crystal, as recited in present claim 34. An advantage of the liquid crystal display device according to the presently claimed invention is that the construction makes it possible for light falling from and then emitted to the visible side to pass through the white diffusing film, while light reflected by the reflector or the reflection-type polarizing film passes through the white diffusing film twice. As a result, a whiter and brighter display can be obtained with a wide viewing angle in comparison with the device of Iijima in which a reflecting polarizer is present on the visible side of

the diffuser. These features of the presently claimed liquid crystal display device and their advantages are not taught or suggested in Iijima, and the other cited references fail to remedy these deficiencies of Iijima. Therefore, the present claims are not obvious over Iijima or any combination of the cited references including Iijima.

In view of the above, it is submitted that the prior art rejections should be withdrawn.

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

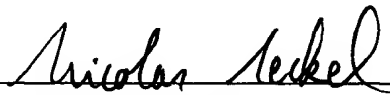
Serial Number: 09/582,474

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In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP

By: 
Nicolas E. Seckel
Attorney for Applicants
Reg. No. 44,373

Atty. Docket No. 000759

Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006
Tel: (202) 659-2930
Fax: (202) 887-0357
NES:rep

Encl.: Petition for Two-Month Extension of Time